

Scaled data based on original data using  
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions

Brand: CORELITE

Report Number: P621692

Luminaire Tested: VLT-FA-100U-125D-835-UNV-STD-W-4

Issue Date: 9/2/2020

**Test Information**

Test Method: LM-79-2019  
Report Number: P621692  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2203-563-26, G2-2203-563-21)  
Test Lab: INNOVATION CENTER  
Issue Date: 9/2/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: VLT-FA-100U-125D-835-UNV-STD-W-4  
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE  
LIGHT SHAPING LENS - ASYMMETRIC  
DOWNLIGHT 1250 LUMENS PER FOOT  
UPLIGHT 1000 LUMENS PER FOOT  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

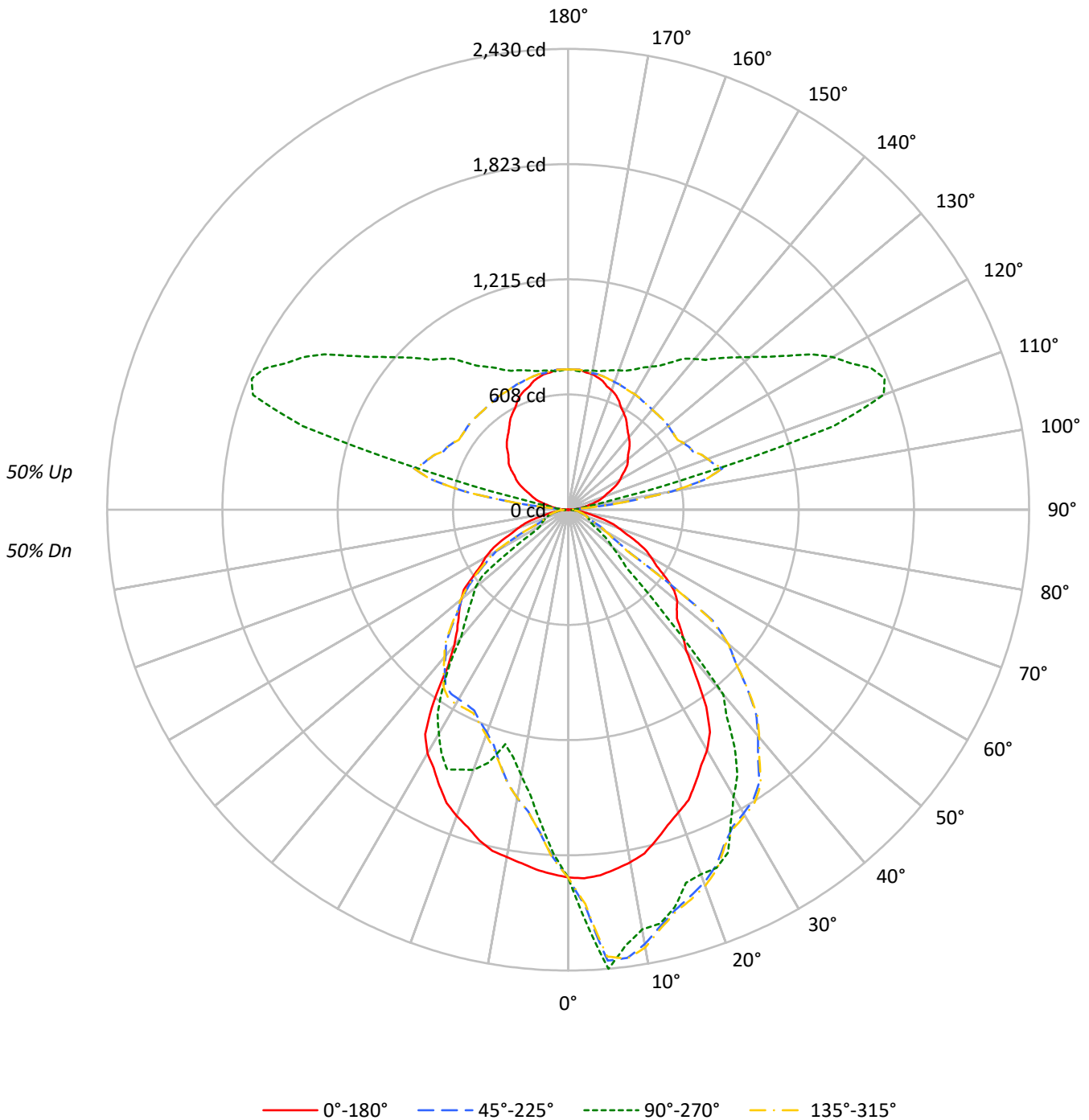
Lumens per Lamp: N/A  
Luminaire Lumens: 7975.1 lumens  
Efficiency: N/A  
Efficacy: 117.8 lumens/watt  
Spacing Criteria (0/90/45): 1.14 / 1.19 / 1.3  
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 67.7  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20					20					20					20					20	
RC	80					70					50					30					10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0	
RCR																						
0	107	107	107	107	99	99	99	99	83	83	83	69	69	69	56	56	56	50				
1	99	95	91	88	91	88	85	82	74	72	70	62	61	59	51	50	49	44				
2	91	84	78	73	83	78	73	68	66	63	59	56	53	51	46	44	43	38				
3	83	74	67	62	77	69	63	58	59	55	51	50	47	44	41	39	37	33				
4	76	66	59	53	70	62	55	50	53	48	44	45	41	38	38	35	33	29				
5	70	59	52	46	65	55	49	43	48	43	39	41	37	34	34	31	29	26				
6	65	54	46	40	60	50	43	38	43	38	34	37	33	30	31	28	26	23				
7	60	49	41	36	56	45	39	34	39	34	30	34	30	27	29	26	23	21				
8	56	44	37	32	52	41	35	30	36	31	27	31	27	24	26	23	21	19				
9	52	40	33	28	48	38	31	27	33	28	24	29	25	22	25	21	19	17				
10	49	37	30	26	45	35	29	24	31	26	22	27	23	20	23	20	17	16				

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°	270°
0°	13915	13915	13915	13915
5°	13939	17506	13726	11936
10°	13756	16372	13554	10363
15°	13380	16120	13424	9511
20°	12970	15621	13120	11147
25°	12573	15790	12714	11964
30°	12128	14449	12292	11295
35°	11111	13393	10835	10126
40°	9055	11918	8740	8242
45°	8227	4424	8307	7507
50°	8368	3369	8214	7135
55°	7897	2616	7625	4270
60°	7276	2011	7219	2378
65°	6699	2077	6564	2511
70°	5961	2193	5795	2608
75°	5088	2296	4869	2681
80°	3831	2364	3587	2773
85°	2602	2108	2272	2602

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 22.5°

Vertical Angle: 45°

Luminance: 15235 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	187.1	2.3
10°-20°	512.4	6.4
20°-30°	766.7	9.6
30°-40°	872.0	10.9
40°-50°	745.7	9.4
50°-60°	502.9	6.3
60°-70°	259.6	3.3
70°-80°	117.2	1.5
80°-90°	36.6	0.5
90°-100°	91.0	1.1
100°-110°	648.3	8.1
110°-120°	880.2	11.0
120°-130°	716.4	9.0
130°-140°	576.2	7.2
140°-150°	454.2	5.7
150°-160°	332.1	4.2
160°-170°	206.3	2.6
170°-180°	70.3	0.9
0°-30°	1466.2	18.4
0°-40°	2338.2	29.3
0°-60°	3586.8	45.0
0°-90°	4000.1	50.2
90°-120°	1619.5	20.3
90°-150°	3366.3	42.2
90°-180°	3975.0	49.8
0°-180°	7975.1	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	1939	1939	1939	1939	1939	
5°	1935	2430	1906	1657	1935	183
15°	1801	2170	1807	1280	1801	507
25°	1588	1994	1606	1511	1588	731
35°	1268	1529	1237	1156	1268	775
45°	811	436	819	740	811	643
55°	631	209	610	341	631	562
65°	394	122	387	148	394	390
75°	184	83	176	97	184	196
85°	32	26	28	32	32	40
90°	0	14	0	14	0	3
95°	37	51	37	51	37	42
105°	144	712	144	712	144	152
115°	256	1764	256	1764	256	254
125°	368	1415	368	1415	368	327
135°	456	1131	456	1131	456	351
145°	540	949	540	949	540	339
155°	633	814	633	814	633	291
165°	703	759	703	759	703	197
175°	740	731	740	731	740	70
180°	740	740	740	740	740	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	1939.1	1939.1	1939.1	1939.1	1939.1	1939.1	1939.1	1939.1	1939.1	1939.1	1939.1
2.5°	1945.4	2011.7	2095.3	2152.7	2177.3	2152.7	2081.1	2011.2	1923.3	1897.0	1834.9
5°	1935.1	2139.6	2386.8	2416.7	2430.2	2416.7	2365.1	2127.3	1905.5	1811.0	1708.3
7.5°	1911.4	2269.0	2384.1	2317.4	2317.8	2330.1	2387.6	2257.9	1880.7	1732.1	1606.1
10°	1887.8	2341.0	2325.7	2229.4	2246.8	2239.1	2343.4	2326.9	1860.1	1688.5	1544.5
12.5°	1856.2	2363.5	2248.4	2216.8	2235.7	2224.9	2259.8	2351.2	1842.8	1657.2	1473.5
15°	1801.0	2331.4	2183.7	2169.8	2169.8	2179.5	2193.5	2341.2	1806.9	1600.5	1386.7
17.5°	1744.2	2267.2	2138.7	2070.3	2062.9	2075.7	2154.9	2283.7	1756.0	1537.7	1302.7
20°	1698.4	2223.0	2092.9	2012.8	2045.6	2016.6	2110.7	2235.0	1718.1	1498.2	1250.6
22.5°	1657.4	2168.1	2034.5	2000.4	2044.0	2001.2	2050.7	2180.0	1673.9	1454.1	1211.2
25°	1587.9	2075.9	1946.9	1978.9	1994.3	1978.9	1954.8	2084.0	1605.7	1397.4	1169.7
27.5°	1518.9	1978.7	1881.5	1902.9	1855.8	1892.1	1892.1	1979.1	1535.5	1331.4	1157.1
30°	1463.7	1911.1	1848.3	1817.1	1743.8	1801.6	1862.1	1911.6	1483.4	1288.6	1154.0
32.5°	1391.1	1849.3	1815.2	1707.2	1660.1	1699.5	1830.6	1848.1	1402.9	1249.8	1150.8
35°	1268.4	1762.1	1755.6	1577.0	1528.8	1565.4	1769.4	1757.6	1236.8	1188.6	1126.3
37.5°	1103.9	1684.4	1641.6	1445.3	1368.6	1435.7	1654.6	1676.1	1040.3	1132.5	1069.1
40°	966.6	1632.0	1556.4	1347.5	1272.3	1337.9	1566.2	1627.4	933.0	1093.1	1006.0
42.5°	889.2	1585.5	1466.4	1244.0	778.4	1228.2	1476.3	1579.6	866.8	1042.3	950.8
45°	810.7	1501.2	1335.4	688.6	435.9	655.8	1337.4	1480.2	818.6	965.2	866.0
47.5°	776.4	1397.5	1198.5	414.8	368.1	402.8	1197.4	1374.7	776.8	887.9	785.1
50°	749.6	1332.1	1100.7	365.5	301.8	352.0	1102.7	1310.5	735.8	836.1	729.9
52.5°	705.4	1253.9	960.3	302.8	260.8	295.5	937.0	1229.4	693.2	779.6	660.4
55°	631.2	1103.8	400.4	238.0	209.1	228.4	380.7	1066.6	609.5	690.5	579.9
57.5°	552.7	939.6	280.9	185.3	162.1	183.4	278.9	902.0	542.5	584.9	505.8
60°	507.0	829.1	228.8	155.5	140.1	153.6	226.8	796.2	503.0	514.6	437.9
62.5°	461.2	716.9	189.4	136.8	132.2	134.9	189.0	680.9	454.1	454.9	308.5
65°	394.5	543.0	140.1	124.2	122.3	122.3	136.1	523.6	386.6	375.1	177.5
67.5°	326.7	389.9	112.4	114.4	112.4	112.4	110.5	378.9	318.8	299.1	134.1
70°	284.1	299.5	104.5	106.5	104.5	104.5	102.6	291.6	276.2	231.8	126.2
72.5°	243.0	204.4	96.7	97.0	96.7	96.7	94.7	191.9	235.1	163.0	115.2
75°	183.5	102.4	82.8	82.8	82.8	82.8	80.9	98.4	175.6	106.1	98.6
77.5°	127.4	67.6	68.6	68.3	68.3	66.7	66.7	67.1	119.9	73.3	79.7
80°	92.7	56.1	59.2	57.2	57.2	57.2	57.2	54.0	86.8	61.7	67.1
82.5°	65.9	44.7	48.1	46.2	46.2	46.2	46.2	44.2	60.0	50.3	54.4
85°	31.6	29.6	31.6	27.6	25.6	27.6	29.6	29.5	27.6	33.4	35.5
87.5°	9.5	15.0	14.5	12.3	12.3	12.3	12.9	13.4	7.9	16.5	16.1
90°	0.0	4.6	9.3	14.0	14.0	14.0	9.3	4.6	0.0	4.6	9.3
92.5°	11.2	15.7	20.5	28.9	32.6	28.9	20.5	15.7	11.2	15.7	20.5
95°	37.2	69.1	37.2	42.1	51.2	42.1	37.2	69.1	37.2	69.1	37.2
97.5°	66.1	132.5	273.7	80.7	69.8	80.7	273.7	132.5	66.1	132.5	273.7
100°	88.4	165.8	549.2	161.6	107.0	161.6	549.2	165.8	88.4	165.8	549.2
102.5°	110.8	191.8	742.8	426.6	233.6	426.6	742.8	191.8	110.8	191.8	742.8
105°	144.3	221.6	842.4	1076.1	712.1	1076.1	842.4	221.6	144.3	221.6	842.4
107.5°	177.8	236.0	804.2	1566.2	1466.9	1566.2	804.2	236.0	177.8	236.0	804.2
110°	200.1	254.7	781.9	1645.7	1768.5	1645.7	781.9	254.7	200.1	254.7	781.9



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
112.5°	222.5	277.1	759.5	1599.2	1805.8	1599.2	759.5	277.1	222.5	277.1	759.5
115°	256.0	310.6	726.0	1509.0	1763.9	1509.0	726.0	310.6	256.0	310.6	726.0
117.5°	290.4	344.1	717.7	1411.5	1673.6	1411.5	717.7	344.1	290.4	344.1	717.7
120°	316.5	366.5	702.8	1337.3	1610.3	1337.3	702.8	366.5	316.5	366.5	702.8
122.5°	335.1	388.8	684.1	1273.5	1524.7	1273.5	684.1	388.8	335.1	388.8	684.1
125°	367.7	417.7	684.1	1196.4	1414.8	1196.4	684.1	417.7	367.7	417.7	684.1
127.5°	394.7	445.6	685.1	1107.0	1322.7	1107.0	685.1	445.6	394.7	445.6	685.1
130°	409.6	464.2	688.8	1047.2	1251.9	1047.2	688.8	464.2	409.6	464.2	688.8
132.5°	428.2	482.8	688.8	1020.3	1188.6	1020.3	688.8	482.8	428.2	482.8	688.8
135°	456.1	506.2	688.8	985.3	1130.9	985.3	688.8	506.2	456.1	506.2	688.8
137.5°	479.4	533.1	688.8	946.7	1071.4	946.7	688.8	533.1	479.4	533.1	688.8
140°	498.0	548.0	688.8	924.1	1037.8	924.1	688.8	548.0	498.0	548.0	688.8
142.5°	516.6	563.0	692.5	897.9	1004.3	897.9	692.5	563.0	516.6	563.0	692.5
145°	539.9	585.4	693.4	858.4	949.4	858.4	693.4	585.4	539.9	585.4	693.4
147.5°	567.8	607.8	699.0	830.0	900.1	830.0	699.0	607.8	567.8	607.8	699.0
150°	586.4	622.8	702.8	811.1	870.3	811.1	702.8	622.8	586.4	622.8	702.8
152.5°	605.0	637.8	702.8	796.0	844.2	796.0	702.8	637.8	605.0	637.8	702.8
155°	632.9	655.7	707.4	778.0	814.5	778.0	707.4	655.7	632.9	655.7	707.4
157.5°	655.3	677.1	713.0	766.7	793.0	766.7	713.0	677.1	655.3	677.1	713.0
160°	670.2	688.4	716.7	759.1	781.9	759.1	716.7	688.4	670.2	688.4	716.7
162.5°	681.3	699.6	720.4	755.2	770.7	755.2	720.4	699.6	681.3	699.6	720.4
165°	702.8	711.9	726.0	745.0	758.6	745.0	726.0	711.9	702.8	711.9	726.0
167.5°	714.9	723.0	730.7	740.2	748.4	740.2	730.7	723.0	714.9	723.0	730.7
170°	726.0	730.6	730.7	740.1	744.6	740.1	730.7	730.6	726.0	730.6	730.7
172.5°	729.8	737.9	734.4	736.4	740.9	736.4	734.4	737.9	729.8	737.9	734.4
175°	740.0	744.5	740.0	735.2	730.7	735.2	740.0	744.5	740.0	744.5	740.0
177.5°	740.0	743.6	740.0	739.9	736.3	739.9	740.0	743.6	740.0	743.6	740.0
180°	740.0	740.0	740.0	740.0	740.0	740.0	740.0	740.0	740.0	740.0	740.0



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**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
0°	1939.1	1939.1	1939.1	1939.1	1939.1	1939.1
2.5°	1812.8	1811.2	1814.3	1841.2	1896.0	1945.4
5°	1651.2	1657.0	1662.8	1708.3	1804.0	1935.1
7.5°	1527.0	1518.5	1531.6	1605.7	1723.2	1911.4
10°	1441.5	1422.2	1441.5	1542.6	1679.5	1887.8
12.5°	1360.9	1337.0	1367.1	1477.9	1643.3	1856.2
15°	1257.1	1280.2	1266.7	1390.7	1588.8	1801.0
17.5°	1281.7	1398.2	1306.4	1314.9	1534.7	1744.2
20°	1340.1	1459.7	1378.7	1264.4	1499.7	1698.4
22.5°	1393.1	1483.4	1410.1	1221.8	1464.9	1657.4
25°	1433.9	1511.0	1430.0	1183.6	1414.3	1587.9
27.5°	1435.9	1446.7	1436.7	1180.4	1351.9	1518.9
30°	1409.3	1363.1	1405.5	1183.6	1307.4	1463.7
32.5°	1333.5	1281.0	1317.3	1177.2	1262.6	1391.1
35°	1225.4	1155.9	1206.1	1144.1	1193.2	1268.4
37.5°	1111.3	1023.4	1092.8	1078.6	1133.9	1103.9
40°	1034.1	879.8	1018.6	1013.9	1101.6	966.6
42.5°	935.2	804.0	921.3	961.8	1065.9	889.2
45°	755.1	739.7	747.4	873.9	990.1	810.7
47.5°	690.6	680.1	686.7	793.8	904.5	776.4
50°	652.6	639.1	648.8	741.7	849.9	749.6
52.5°	600.0	563.4	596.2	670.7	793.3	705.4
55°	451.2	341.3	449.3	589.8	708.4	631.2
57.5°	264.8	197.3	259.0	513.3	600.2	552.7
60°	179.2	165.7	181.1	451.7	528.2	507.0
62.5°	163.6	159.4	164.0	314.4	463.9	461.2
65°	149.9	147.9	149.9	181.5	382.9	394.5
67.5°	135.7	133.7	137.2	139.3	302.4	326.7
70°	126.2	124.3	126.2	128.2	232.0	284.1
72.5°	115.2	113.2	115.2	117.2	163.2	243.0
75°	98.6	96.7	98.6	100.6	108.2	183.5
77.5°	79.7	79.7	81.6	81.7	75.7	127.4
80°	67.1	67.1	69.0	69.0	65.7	92.7
82.5°	54.4	52.9	56.3	58.0	54.3	65.9
85°	33.5	31.6	35.4	37.5	35.4	31.6
87.5°	15.4	13.8	16.9	19.2	18.1	9.5
90°	14.0	14.0	14.0	9.3	4.6	0.0
92.5°	28.9	32.6	28.9	20.5	15.7	11.2
95°	42.1	51.2	42.1	37.2	69.1	37.2
97.5°	80.7	69.8	80.7	273.7	132.5	66.1
100°	161.6	107.0	161.6	549.2	165.8	88.4
102.5°	426.6	233.6	426.6	742.8	191.8	110.8
105°	1076.1	712.1	1076.1	842.4	221.6	144.3
107.5°	1566.2	1466.9	1566.2	804.2	236.0	177.8
110°	1645.7	1768.5	1645.7	781.9	254.7	200.1





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CATALOG NUMBER: VLT-FA-100U-125D-835-UNV-STD-W-4

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	1599.2	1805.8	1599.2	759.5	277.1	222.5
115°	1509.0	1763.9	1509.0	726.0	310.6	256.0
117.5°	1411.5	1673.6	1411.5	717.7	344.1	290.4
120°	1337.3	1610.3	1337.3	702.8	366.5	316.5
122.5°	1273.5	1524.7	1273.5	684.1	388.8	335.1
125°	1196.4	1414.8	1196.4	684.1	417.7	367.7
127.5°	1107.0	1322.7	1107.0	685.1	445.6	394.7
130°	1047.2	1251.9	1047.2	688.8	464.2	409.6
132.5°	1020.3	1188.6	1020.3	688.8	482.8	428.2
135°	985.3	1130.9	985.3	688.8	506.2	456.1
137.5°	946.7	1071.4	946.7	688.8	533.1	479.4
140°	924.1	1037.8	924.1	688.8	548.0	498.0
142.5°	897.9	1004.3	897.9	692.5	563.0	516.6
145°	858.4	949.4	858.4	693.4	585.4	539.9
147.5°	830.0	900.1	830.0	699.0	607.8	567.8
150°	811.1	870.3	811.1	702.8	622.8	586.4
152.5°	796.0	844.2	796.0	702.8	637.8	605.0
155°	778.0	814.5	778.0	707.4	655.7	632.9
157.5°	766.7	793.0	766.7	713.0	677.1	655.3
160°	759.1	781.9	759.1	716.7	688.4	670.2
162.5°	755.2	770.7	755.2	720.4	699.6	681.3
165°	745.0	758.6	745.0	726.0	711.9	702.8
167.5°	740.2	748.4	740.2	730.7	723.0	714.9
170°	740.1	744.6	740.1	730.7	730.6	726.0
172.5°	736.4	740.9	736.4	734.4	737.9	729.8
175°	735.2	730.7	735.2	740.0	744.5	740.0
177.5°	739.9	736.3	739.9	740.0	743.6	740.0
180°	740.0	740.0	740.0	740.0	740.0	740.0

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